

**Commonwealth of Kentucky**  
**Division for Air Quality**  
**EXECUTIVE SUMMARY**

FINAL  
Title V Operating  
Permit, No. V-06-038  
**Duke Energy Kentucky**  
**East Bend Station**  
Union, Kentucky 41091  
August 3, 2007  
Herbert Campbell, Reviewer  
Source I.D. #           21-015-00029  
Source A.I. #           176  
Activity I.D. #        APE20040006

**SOURCE DESCRIPTION:**

An application for a renewal of the Title V Permit, V-97-015R2, for the Duke Energy Kentucky /East Bend Generating Station was received on June 22, 2004. A nitrogen oxides (NO<sub>x</sub>) budget permit application was received on June 16, 2003. The new Title V permit will include a renewal of the Phase II Acid Rain Permit and the NO<sub>x</sub> Budget Permit.

The source is an electric power generating station consisting of one (1) pulverized coal-fired boiler. The boiler (E. Unit 02) has an input capacity of 6313 MMBtu/hr. The unit is wall-fired, equipped with an electrostatic precipitator (ESP), flue gas desulfurization (FGD) unit, low nitrogen oxide burners and a Selective Catalytic Reduction (SCR) unit. In addition, ash, coal and limestone related equipment as well as a synfuel operation for the binding of coal fines to form coal pellets is utilized.

The facility is classified as a Title V major source of air pollution based on the potential to emit more than 100 tons per year (tpy) of particulate matter less than 10 microns (PM<sub>10</sub>), carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), and sulfur dioxide (SO<sub>2</sub>).

The processes that are new or different from the most recent source-wide Title V renewal permit application include:

1. Installation of the Selective Catalytic Reduction (SCR) unit for reduction of nitrogen oxides from E. Unit 2.
2. A Synfuel Production facility (E. Unit 15) has been added at the facility.
3. Metal Cleaning Degreasers (E. Unit 7) have been removed as stated in the letter of notification dated November 3, 2000.

**U.S. EPA REVIEW:**

The Division has issued the proposed permit on June 20, 2007. The U.S. EPA was notified of the issuance of the proposed permit on June 20, 2007. The comment period expired 45 days from the date of e-mail. No comments were received during this period. The permit is now being issued final.